

Crab Boat Deck Safety Study

Jensen Maritime Consultants, Inc.



Introduction

Commercial crab fishing is rated as the most dangerous job in America. While falls overboard or vessel sinkings cause most of the deaths, most of the non-fatal injuries are related to machinery on deck. With this project, we set out to find practical ways to reduce deck injuries and falls overboard.

This project is entirely non-regulatory. The goal of the project is to give fishermen information about how to make safety improvements on their boats to reduce injuries, increasing productivity and reducing downtime. Project funding was provided by the National Institute for Occupational Safety and Health of the Centers for Disease Control and Prevention.

The Project

Our first step was a review of injury data, so we would know where to focus our attention. We found that most of the injuries were related to the pot launcher, bait chopper, and slips or falls. We interviewed a small group of fishermen to find out what they were doing to prevent injuries on their boats. Since we wanted ideas that worked, what better place to start than ideas that are already out on boats? We took our list of ideas and improvements out to the fleet in Dutch Harbor before the October 2001 red king crab season. Over three days, we surveyed 89 fishermen from 75 different boats of all sizes, types, and age. We wanted to know which ideas would work, and which were already common in the fleet.

Results

Fishermen thought that the following safety improvements were the most likely to prevent deck accidents:

1. Lighting: Everybody knows that people need light to work effectively. Before the next season, go out to your boat at night and turn on all of the deck lights. Walk around the deck to find the darkest spots. Is there enough light to work? Think about adding more lights. See if adding another light fixture by the bait chopper would help the crew see their work. And while you're there, look over the side at the launcher to see if you want to add a light shining over the side.

2. Rail Height: While you're on the boat, check out your rail height. Are there any spots where the rail is less than waist-high? If so, consider adding raised pipe rails to help keep the crew on board.

3. Bait Chopper: Take a look at your bait chopper. Could a tired crewmember put his arm in far enough to chop up his fingers as he pushes on the bait block? Could he accidentally touch the blades on the bottom as he scoops out bait? If so, make up a simple guard out of conveyor belt or other material. A guard on the top will also help prevent eye injuries from flying bait. If you have to push on the bait block while it is being chopped, consider replacing your chopper with the newer "finger" style that doesn't require pushing on the block, chops bait faster, and increases productivity.



4. Pot Guides: In heavy weather, do your pots swing fore-and-aft after they're out of the water but before they are in the launcher's dogs? If so, think about installing simple steel pot guides on the outside of the bulwark above the deck guard pipe. The guides should be centered on the pot launcher and about as wide as the top bar of the pot launcher. Make sure that the tops of the guides are at or below the rail, so they don't create a pinching hazard. The guides will help stop the pot from swinging,



reducing the chance of the pot hitting a crewmember or your hauler. Since the crew doesn't have to work as hard to control the pot, they'll also be less tired, more alert, and safer.

5. Non-Skid Grating: Are your decks slippery, especially in the low-wear areas under the overhangs? Consider installing non-skid fiberglass or metal gratings in these areas to help the crew keep their footing. If you don't want to install new grating, add non-skid fiber or rubber mats at the bait chopper, hydraulics control, and hauling stations.

6. Emergency Preparedness: Are you ready for an emergency? Are your liferaft and EPIRB hydrostatic releases up to date and installed properly? Is your EPIRB registered? Practice a man-overboard drill by putting a crewmember (wearing a survival suit) in the harbor. Can you retrieve him? Now do the drill again, except have the person pretend to be unconscious and send a "rescue swimmer" (also in a survival suit) after him. Find out how you will get your crewmembers out of the water before you need to do it on the Bering Sea. If necessary, get more retrieval equipment (lifeslings, life rings, dedicated rescue swimmer survival suit, etc.) and repeat the drills. As long as you're thinking about rescuing someone from the water, remember how much easier it is to find and recover them if they are wearing a lifejacket with a strobe light. Go and check out the range of lifejackets available and find one that you'll wear on deck. Buy it and wear it.

7. Your Boat: This list is a start, but not everything here is appropriate for every boat. Think about how and where the crew works on your boat. Is there any way to make your boat safer? Think about the accidents you've seen and if there is any way to add something to your boat that would have prevented them.

What's Next?

Because of space limitations, this list covers only some of the ideas we have and will publish back to the industry in the next few months. We will also look at other fisheries

as well. Finally, we need your help, since this project will not succeed without it. If you have any ideas of how to make fishing boats safer, stories about accidents you saw, or any questions about this project, please contact Jensen Maritime:

Mr. Eric Blumhagen
Jensen Maritime Consultants, Inc.
4241 21st Avenue West, Suite 404
Seattle, WA 98199
Tel: (206) 284-1274, Fax: (206) 284-2556
ebumhagen@jensenmaritime.com

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